

PENDING CLAIMS

The following is a list of currently pending claims. Claims 6 and 20-37 are cancelled. Please amend claims 1, 12, 13, 14, 16, and 19 as shown below.

1. (Currently amended) A method for making a semiconductor device, comprising:
providing a metal structure comprising tungsten on a substrate;
providing an insulating layer over the metal structure;
providing a capping structure over the insulating layer; and
annealing the resulting structure, wherein a portion of the metal structure has a width greater than about 1 micron, wherein the capping structure and annealing prevents peeling of the metal structure when heated.
2. (Original) The method of claim 1, wherein the substrate comprises a dielectric upper surface.
3. (Original) The method of claim 1, the capping structure comprising a substantially continuous layer.
4. (Original) The method of claim 1, the capping structure comprising a dielectric material.
5. (Original) The method of claim 4, wherein the dielectric material of the capping structure is PSG.
6. (Cancelled)
7. (Original) The method of claim 1, including planarizing the insulating layer before providing the capping structure.
8. (Original) The method of claim 1, including annealing for about 30 to about 60 minutes at a temperature ranging from about 675 to about 700 degrees Celsius.

9.-11. (Cancelled)

12. (Currently amended) A method for making a semiconductor device, comprising:
providing a metal structure on a substrate, the metal structure comprising tungsten and a portion of the metal structure having a width greater than about 1 micron; and
providing an insulating layer over the metal structure;
providing a capping structure over the insulating layer; and
annealing the resulting structure;
wherein the capping structure and annealing ~~decreases~~ prevents peeling of the metal structure when heated.

13. (Currently amended) A method for making a semiconductor device, comprising:
providing a metal structure on a substrate, the metal structure comprising tungsten and a portion of the metal structure having a width greater than about 1 micron; and
providing an insulating layer over the metal structure;
providing a capping structure over the insulating layer; and
annealing the resulting structure;
wherein the annealing ~~decreases~~ prevents peeling of the metal structure when heated.

14. (Currently amended) A method for preventing peeling of a metal structure in a semiconductor device, comprising:
providing a metal structure comprising tungsten on a substrate;
providing an insulating layer over the metal structure;
providing a capping structure over the insulating layer; and

annealing the resulting structure, wherein a portion of the metal structure has a width greater than about 1 micron, and wherein the annealing prevents peeling of the metal structure when heated.

15. (Cancelled)

16. (Currently amended) A method for preventing peeling of a metal structure in a semiconductor device, comprising:

providing a metal structure on a substrate, the metal structure comprising tungsten and a portion of the metal structure having a width greater than about 1 micron; and

providing an insulating layer over the metal structure;

providing a capping structure over the insulating layer; and

annealing the resulting structure;

wherein the annealing ~~decreases~~ prevents peeling of the metal structure when heated.

17.-18. (Cancelled)

19. (Currently amended) A semiconductor device made by the method comprising:

providing a metal structure on a substrate, the metal structure comprising tungsten and a portion of the metal structure having a width greater than about 1 micron; and

providing an insulating layer over the metal structure;

providing a capping structure over the insulating layer; and

annealing the resulting structure;

wherein the capping structure and annealing ~~decreases~~ prevents peeling of the metal structure when heated.

20-37. (Cancelled)

AMENDMENTS TO THE CLAIMS: DISCUSSION

Claims 1, 12, 13, 14, 16, and 19 have been amended to include the limitation that the annealing, or the capping structure and annealing, prevents peeling of the metal structure when heated.

Support for these amendments can be found in paragraphs [09], [027] and [37] of the specification. These amendments do not constitute new matter.